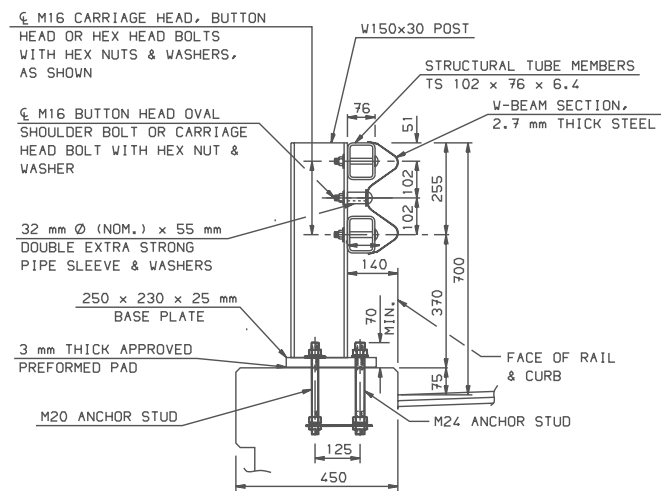
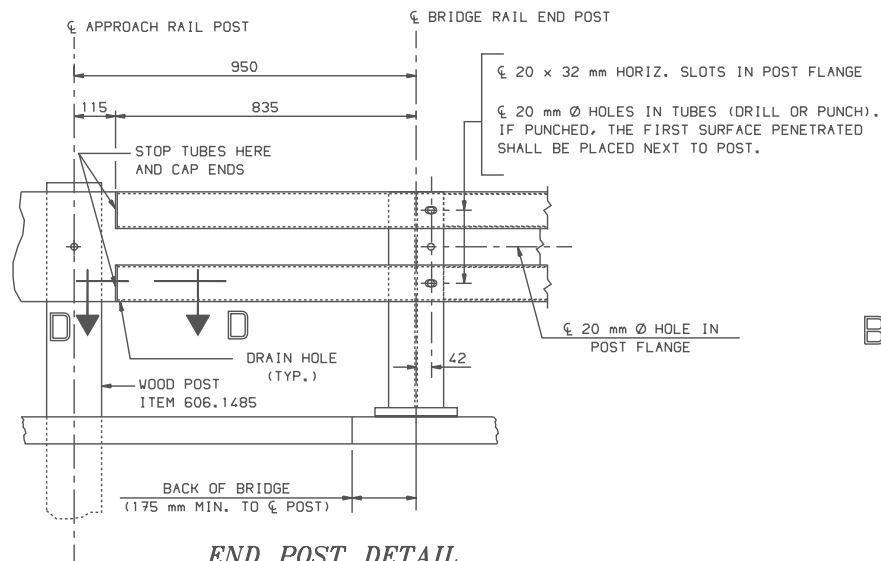


STANDARD NO. BR-R9M

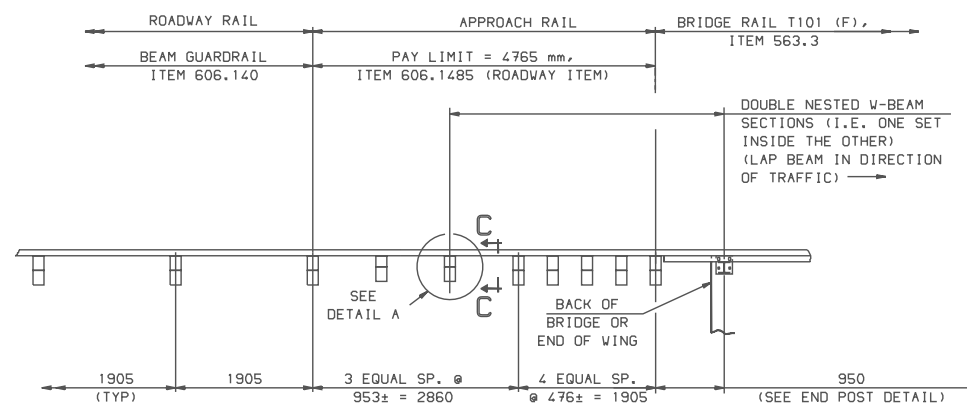


BRIDGE RAIL DETAIL
SCALE 1:10



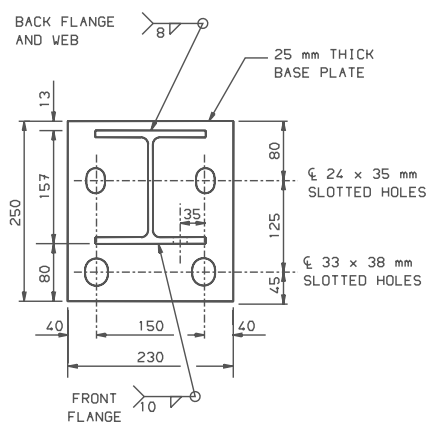
END POST DETAIL

SCALE 1:10



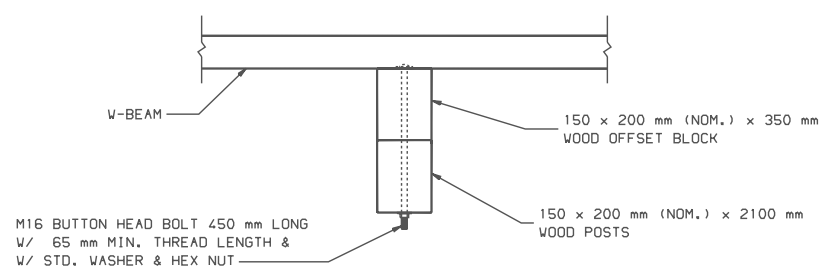
APPROACH RAIL LAYOUT

SCALE 1:50



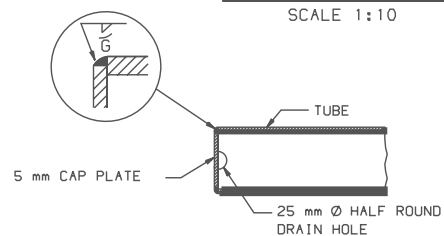
BASE PLATE DETAIL
(SECTION B-B)

SCALE 1:5

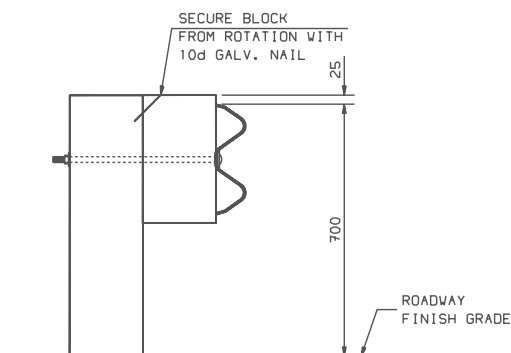


DETAIL "A"

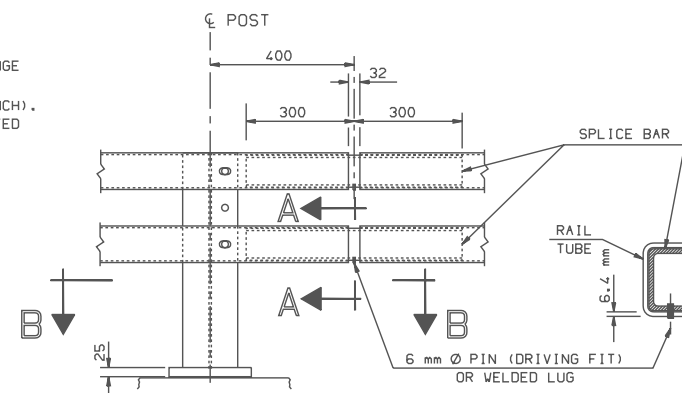
SCALE 1:10



RAIL CAP DETAIL
(SECTION D-D)
SCALE 1:5

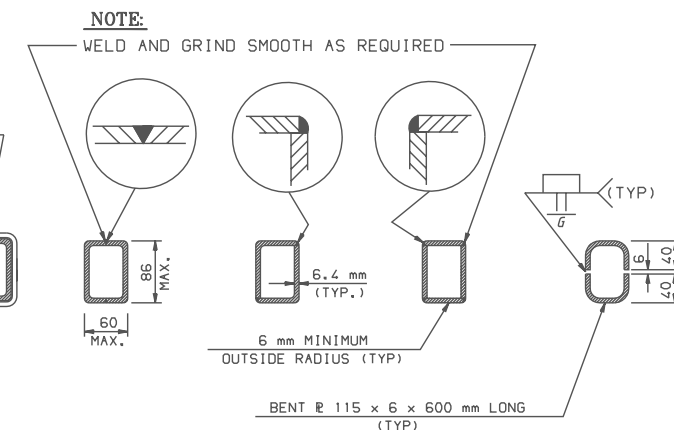


SECTION C-C
SCALE: 1:10



TYPICAL SPLICE

NOTE: THE DIFFERENCE BETWEEN THE OUTSIDE DIMENSIONS OF THE SPLICE BAR AND THE INSIDE DIMENSIONS OF THE RAIL SHALL BE APPROXIMATELY 3 mm (NOT TO EXCEED 5 mm) ALONG EITHER AXIS TO PERMIT CLEARANCE FOR INSIDE WELD FLASH.



SECTION A-A

SPLICE BAR FABRICATION OPTIONS

NOTE: OTHER SECTIONS OF EQUAL OR GREATER STRENGTH ARE ACCEPTABLE FOR SPLICE BARS.

SPLICE BAR DETAILS

NOT TO SCALE

GENERAL NOTES:

1. ITEM 563.3, BRIDGE RAIL T101 (F), SHALL INCLUDE POSTS, BASE PLATES, ANCHOR PLATES, ANCHOR BOLTS, PREFORMED PADS, RAIL ASSEMBLY BOLTS, NUTS, WASHERS, STRUCTURAL TUBING, SPLICE BARS, AND PIPE SLEEVES, AND W-BEAM SECTION.
 - ASTM A 572M GRADE 345 POSTS, BASE PLATES
 - ASTM A 500 GRADE B: STRUCTURAL TUBING
 - ASTM A 36M: PIPE SLEEVES, RAIL SPLICE BARS, & ANCHOR PLATES
 - ASTM A449: ANCHOR STUDS WITH STANDARD NUTS AND HARDENED STEEL COMMERCIAL TYPE A PLAIN WIDE WASHERS
 - ASTM A307: RAIL BOLTS, NUTS, & WASHERS
 - AASHTO M180 TYPE II: W-BEAM SECTION
2. ALL STEEL COMPONENTS SHALL BE GALVANIZED AFTER FABRICATION IN CONFORMANCE TO AASHTO M 232 (ASTM A 153) AND AASHTO M 111 (ASTM A 123). GALVANIZED SURFACES SHALL HAVE A UNIFORM APPEARANCE AND GALVANIZED MATERIAL SHALL BE PROPERLY STORED.
3. HOLES IN BASE PLATES SHALL BE FILLED FLUSH WITH ITEM 562.1, ELASTOMERIC SEALANT AFTER RAIL INSTALLATION.
4. STRUCTURAL TUBING SHALL BE SUPPLIED AS ONE PIECE FOR BRIDGE RAIL 12 METERS OR LESS IN LENGTH. IN OTHER CASES, TUBING SHALL BE SPLICED WITH A SPLICE BAR (SEE SPLICE BAR DETAIL). NO TRANSVERSE BUTT WELDS ARE PERMITTED ON RAIL TUBING WITHIN A CONTINUOUS LENGTH.
5. EACH PIECE OF RAIL TUBING SHALL BE ATTACHED TO A MINIMUM OF THREE POSTS.
6. FOR BRIDGE RAIL POST SPACING, SEE BRIDGE RAIL LAYOUT. THE MAXIMUM BRIDGE RAIL POST SPACING SHALL BE 2540 mm. A POST SPACING OF 2540 mm OR 1905 mm IS RECOMMENDED WHENEVER POSSIBLE FOR USE WITH 7620 mm SECTIONS OF THE STANDARD W-BEAM RAIL.
7. PREFORMED BEARING PADS SHALL CONFORM TO AASHTO M251.
8. NUTS FOR THREADED ANCHOR STUDS CONNECTING THE BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
9. THIS RAIL SYSTEM HAS BEEN SUCCESSFULLY EVALUATED BY FULL-SCALE CRASH TESTS TO MEET NCHRP REPORT 230 SL-2 CRITERIA. (TEXAS TRAFFIC RAIL TYPE T101, REVISED 9/89)

(GALVANIZED - 75 mm CURB REVEAL)

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION, CONCORD, N.H.

METRIC STANDARD PLANS



STANDARD NO.
BR-R9M

THESE PLANS REDUCED
APPROXIMATELY 1/2 SCALE

WINDOW NAME	*.FGB FILE NAME	SHEET SCALE
BR-R9M	BR-MSTNDS-NHBOOK	AS NOTED

REVISION DATES
1/02/01